



# RESEARCH TO PREVENT BLINDNESS INC.



1981 Annual Report



## JULES STEIN, M.D.

April 26, 1896—April 29, 1981

Founder and Chairman

Research to Prevent Blindness, Inc.

Jules Stein's life was a matter of great consequence to humanity. He took on problems that were beyond others—and solved them with disciplined vitality. He confronted worldwide blindness as an intolerable affliction upon mankind, and he brought to life a historic movement to eradicate its causes. He was more than the founder and chairman of Research to Prevent Blindness. He was the spur and the organizational genius that stimulated an entire scientific discipline to unprecedented success in preserving and restoring the gift of sight. In his commitment to eye research he poured not only his energies, but much of his personal fortune. We who were his colleagues drew deeply upon the leadership, the knowledge and the enthusiasm of Dr. Jules Stein. But most fondly remembered in our hearts will be the warmth of his friendship and the generosity of his spirit.



# Research To

598 Madison Avenue, New York, N.Y. 10022

Research to Prevent Blindness (RPB) today is the world's leading voluntary organization in support of vision research. It continues to perform with the same extraordinary effectiveness, economy and efficiency that have guided its operations over more than two decades of service in the research fight against all blinding diseases.

The Officers and Trustees of  
Research to Prevent Blindness (RPB)

**The Essence** of what Jules Stein created in Research to Prevent Blindness (RPB) is reflected in the activities of the organization during 1981—the year that marked his passing. Dr. Stein's efforts sparked an unprecedented search for knowledge of the eye and its disorders, for effective treatments, for tools of advanced technology that would save millions from the threat of visual failure and restore sight to many already blind. He lived to see the nation's finest medical institutions and its most gifted scientists pursuing intensive eye research at the highest scientific level, under the impetus of RPB.

In the two decades since its founding, Research to Prevent Blindness has become the world's leading voluntary organization in support of eye research. It has established the basis for man's first concerted scientific assault upon all blinding diseases.

During 1981 RPB continued to broaden its efforts on both national and international

for the first time—at \$50,000, it became RPB's largest for ongoing research by an American scientist.

As the scope of eye research increased, RPB extended its annual grant support to 53 medical institutions for wide-ranging studies of every major visual affliction. Serving every section of the nation, these constitute the primary arenas for eye research in the world. At the same time, 37 outstanding scientists were working with special funding under various RPB programs to assist and accelerate individual work of the highest potential for saving sight. These included RPB Special Research Scholars, Research Professors, Manpower Award recipients, International Research Scholars and Foreign Fellows. Two appointments in the latter category marked the inauguration of a pilot program to help train a limited number of scientists of other countries to launch studies of eye diseases among their own people.

Eye research continued its forward progress. Clinical studies were producing

In November 1981 the first RPB-Jules Stein Award was given, shared by two scientists whose findings have saved the sight of countless infants. Ophthalmic research—itself an infant discipline at the founding of Research to Prevent Blindness—moved into a new era of achievement without the presence of Dr. Jules Stein, but motivated by the same vigor, creativity and sense of urgency that was his legacy to those who carry on his work for the preservation of sight.



*The powerful electron microscope opens new windows into the nature of normal and diseased ocular tissues.*  
*(Medical College of Wisconsin)*

# Prevent Blindness, Inc.

levels. With the Federal government shifting responsibility for medical research ever more to the voluntary sector, and with the rising cost of research threatening to impede important studies, RPB acted to alleviate growing financial pressures on its grantees. It increased the amount of its annual grants to all institutions by 20 percent. The value of Research Scholars Awards was raised by an average of more than 80 percent. A new Scholars Award was given

advances in the understanding and management of retinal disorders, cataracts, glaucoma, corneal diseases, amblyopia, and other visual afflictions that have plagued mankind since the beginning of time. Sight was being saved that once would have been lost. The new and essential element was research—a massive scientific effort that had begun with Jules Stein and the organization he created.

# RPB-Sponsored Eye Research Centers and Laboratories Currently Receiving RPB Annual Grant Support

RPB grants to major medical institutions from coast to coast support a massive research attack against all blinding eye diseases.

IN ADDITION to RPB's annual unrestricted grants to these institutions, many also receive multiple grant support from RPB, including the funding of RPB Research Professors, Special and International Scholars and Manpower Award scientists.

● Institutions receiving  
RPB grant support  
■ RPB-sponsored  
eye research centers

**14 Million Americans** have seriously impaired vision, not correctable with glasses. They reside in every community in the nation. They and others with eye problems make 31 million visits to doctors for treatment of potentially blinding disorders. 570,000 are hospitalized each year for eye surgery and medical treatment. EYE RESEARCH is a significant, critically important presence in their lives, and in the health care facilities of their communities. What happens to their sight depends largely upon what is happening in the nation's eye research laboratories. In no other area of medicine are the results of research so quickly translated into benefits for patients. EYE RESEARCH is saving hundreds of thousands from blindness and dramatically reducing the staggering economic cost of disability and dependence.

**RESEARCH TO PREVENT BLINDNESS (RPB)**  
is fighting blindness *before it happens.*



RPB's Fund Raising Costs are Less than **2%**

## The RPB Program—1981

Annual grants for advanced research at **53** medical centers across the nation for studies of all blinding diseases.

Special RPB awards to **37** outstanding vision scientists to assist them in pioneering work of unusual promise in saving sight.

Support of worldwide collaboration in the fight against blindness, teaming scientists from **10** foreign countries with American researchers at U.S. institutions.

Support of clinical studies leading to more effective diagnosis, treatment and cure of blinding disorders.

Support of basic research into the structure and functions of the visual system and the disease processes that destroy sight.

Funding for the development of advanced scientific equipment, instrumentation and devices, and the evolution of new techniques and medications for preserving and restoring vision.

Dissemination of significant findings in eye research among scientists and practicing physicians, and to the public.

World leadership in meeting the critical need for scientific research to halt the widespread tragedy of visual disability and blindness.



Advanced instrumentation and operating procedures such as vitreous surgery (photo) are saving sight that once would have been hopelessly lost. (University of Washington, Seattle)



## Research—The Answer to Blindness

- *An infant is operated on in the first days of life—and is saved from a lifetime of blindness.*
- *Cataracts are removed from the eyes of a worried craftsman, and his fears of losing his job are dissipated.*
- *A diabetic college student receives laser therapy and the advance of retinal blindness is forestalled.*
- *A corneal transplant operation permits a mother to see her children again.*

Such are the stories that are repeated a thousand times over in a time of growing victory in the fight against blindness. The miracle of sight restored, of blindness prevented. But these are not miracles. They are the result of research—tedious, demanding research carried out day after day by scientists and physicians who are continuously adding to a growing stockpile of knowledge of sight—and how it may be lost, or saved. And there are less happy stories, too. Stories of failure, of insufficient scientific knowledge, of problems that must wait for another day for their solution.

RPB-supported research deals with the entire process of sight. It explores the visual pathways—normal and diseased—from the point at which light enters the cornea's outer surface until its signals reach the brain to produce the images we take so much for granted. Vision comes to us through an intricate labyrinth of channels and circuits composed of cells, tissues and chemicals that must perform precisely interconnected functions. All are assembled in the smallest of spaces and in the most inaccessible manner. Yet for most of humankind, we open our eyes and in milliseconds an image appears. We see.

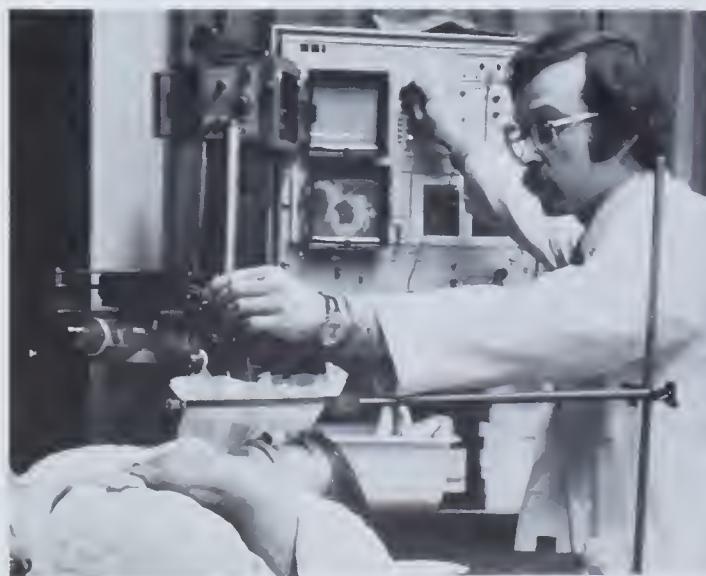
For many millions of people, however, the road is booby-trapped with conditions that impede or block the flow of visual information. To these abnormalities medical science has given names such as cataract, glaucoma, retinal degeneration, strabismus—and myriads of other far more specific designations that are encompassed in the term "eye disease".

RESEARCH TO PREVENT BLINDNESS (RPB) supports a massive attack against all such blinding afflictions. Using RPB funds for a wide variety of research purposes, today's scientists work with concepts and instruments unknown to previous generations. The once-impregnable world inside the human eye is yielding up secrets of the nature and function of its most minute structures, under both normal and diseased conditions. Molecular biology, optics, laser technology, electronics, sonography, microinstrumentation—the list of scientific disciplines and weaponry brought to bear upon blindness is a catalog of modern medical progress. At the hands of skilled researchers and practitioners they are making it possible to observe, diagnose, treat—and ultimately prevent—visual disorders that have destroyed the sight of millions throughout history.

*570,000 are hospitalized each year for eye surgery and medical treatment.*



*Photographing the inner recesses of the eye with the wide-angle fundus camera for diagnosis of sight-threatening retinal diseases. (Stanford University)*



*Ultrasound waves harmlessly penetrate ocular tissues to reveal hidden tumors and other abnormalities. (University of Chicago)*



*Cataractous lenses removed through surgery are classified for cooperative studies to determine the role of sunlight exposure in cataract formation.  
(University of Rochester, N.Y.)*

*450,000 cataract operations are performed each year in the United States.*

## New Conquests—New Challenges

More than 200 scientific papers published in leading medical journals during 1981 credited RPB with financial support of studies covering a broad spectrum of eye disorders. From such reports may be traced the rapid movement of research findings to the hands of the practicing ophthalmologist, extending his capacity to manage the problems of his patients.

Research has produced a revolution in the treatment of eye diseases. Eye surgery has experienced extraordinary advances. Operating under specially-designed microscopes, often with the aid of computer technology to manipulate tiny instruments with exquisite precision, eye surgeons perform the most delicate of procedures with great success and a minimum of trauma to healthy tissues. The laser, once termed "an instrument seeking a disease", has established its key role in the management of retinal detachment and diabetic retinopathy. Its versatility is now being tested in therapy for senile macular degeneration and both open- and closed-angle glaucoma.

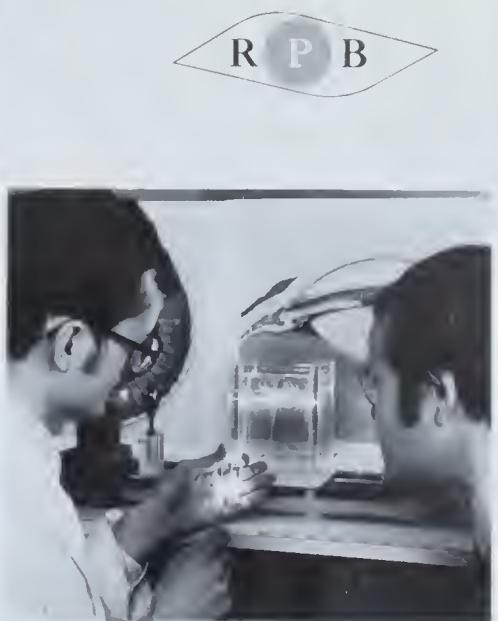
The cataractous lens—one of the eye's oldest and most common afflictions—is the focus of unprecedented progress in restoring sight. More than 450,000 operations for cataract removal are performed each year with 98 percent success. Hospitalization has been reduced to a few days; early resumption of normal life is typical. Thick eyeglasses that once identified cataract patients have given way to new generations of contact lenses, and in many cases to the artificial intraocular lens implant, clipped permanently within the eye. Corneal surgery is reaching new levels of perfection. Transplants are routine, and even the newborn have been given sight in the process.

Techniques have been developed for safely removing diseased vitreous from the inner cavity of the eye, restoring sight once considered lost forever. The procedure, vitrectomy, was too dangerous to attempt until RPB-supported research proved otherwise.

Modern surgery is adjusting eye muscles in strabismus, removing sight- and life-threatening eye cancers, repairing the damage of disease, birth defects and injuries.



Corneal cells grown in cultures provide a testing ground for their chemical analysis and response to potential medications.  
(Medical College of Georgia)



A single drop of fluorescein, illuminated by a laser, demonstrates its effectiveness as a tracer dye, used to reveal normal and abnormal eye functions.  
(Mayo Institutions)

2,000,000 cases of corneal disease occur each year.

## Annual Research Grants to Institutions

	1981 GRANTS	TOTAL GRANTED THROUGH 1981
Albany Medical College Albany, New York	\$12,000	\$ 72,000
Arkansas, University of Little Rock, Arkansas	—	37,500
Baylor College of Medicine Houston, Texas	12,000	112,000
Boston University Boston, Massachusetts	12,000	92,000
California, Davis, University of Davis, California	—	5,000
California, Los Angeles, University of Los Angeles, California	12,000	127,000
California, San Francisco, University of San Francisco, California	12,000	127,000
Chicago, University of Chicago, Illinois	12,000	127,000
Colorado, University of Denver, Colorado	12,000	107,000
Columbia University New York, New York	12,000	127,000
Cornell University New York, New York	12,000	72,000
Case Western Reserve University Cleveland, Ohio	—	5,000
Duke University Durham, North Carolina	12,000	97,000
Albert Einstein College of Medicine New York, New York	12,000	87,000
Emory University Atlanta, Georgia	12,000	42,000
Eye Bank for Sight Restoration New York, New York	—	10,000
Florida, University of Gainesville, Florida	12,000	117,000
George Washington University Washington, D.C.	—	47,500
Georgetown University Washington, D.C.	12,000	77,000
Georgia, Medical College of Augusta, Georgia	12,000	47,000
Harvard University (Howe Laboratory of Ophthalmology) Boston, Massachusetts	12,000	127,000
Illinois, University of Chicago, Illinois	12,000	67,000

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Contributing to the success of ophthalmic surgery is the continued improvement of surgical materials, drugs and instrumentation. Scanning microscopes, dye-tracing techniques, ultrasound devices, rapid-sequence photography—a growing host of precision instruments for observing, measuring and testing ocular tissues, cells and structures—provide physicians and surgeons with information critical to the well-being of the patient and the outcome of their efforts. All are the products of research.

But eye research looks beyond surgery. It explores the worlds of biochemistry, microbiology, pharmacology, genetics, pathology—every scientific discipline related to the visual processes—in the search for medical solutions that will avert blindness without surgical intervention. More effective chemical agents are constantly being devised to counteract abnormal conditions in the eye that interfere with vision.

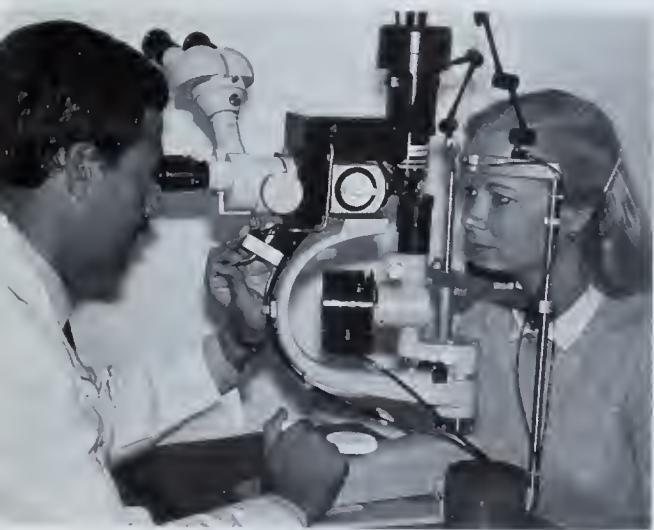
Millions of glaucoma patients depend upon eye drops to reduce the damaging intraocular pressure that would otherwise destroy their sight. New drugs are available to manage and cure infectious diseases. Others are speeding the healing process. Vision scientists are leading the search for effective agents against the destructive herpes virus now sweeping the country, and which is the major cause of corneal blindness. The development of a potent antiviral drug, acyclovir, approved by the FDA in 1981, was initially reported two years earlier at an RPB seminar.

Encouraging developments have occurred in the long effort to produce a medical means of controlling cataracts. The initial break came after years of study with the indictment of the substance, sorbitol, and the enzyme, aldose reductase, as the causative factors in the formation of so-called "sugar" cataracts common to diabetics. If the activity of the enzyme could be blocked, scientists believed that cataract formation might be arrested, or even reversed. Thousands of chemicals and combinations of chemicals have since been devised and tested in the search for an inhibiting agent. Such an agent must not only be effective against the enzyme, but it must not adversely affect other cells, have no serious toxic characteristics, be easily administered in practical dosage, and be producible for public distribution. A number of agents have now been found that it is hoped will meet these tests. Controlled clinical trials have been planned by the National Eye Institute.



*A three-dimensional model of feline visual cells provides unusual insight into the microscopic structures of the visual pathways. (University of Louisville)*

Testing a patient with strabismus, a disorder in which the eyes do not properly fuse images, to identify the source of muscle imbalance. (Columbia University)



The laser—used extensively in diabetic retinopathy and retinal detachment—is proving its versatility in the treatment of other serious visual disorders. (University of Miami)

*300,000 diabetics are presently at risk of blindness.*

## Annual Research Grants to Institutions

(continued)

	1981 GRANTS	TOTAL GRANTED THROUGH 1981
Indiana University Indianapolis, Indiana	—	\$105,000
Iowa, University of Iowa City, Iowa	\$12,000	127,000
Jefferson Medical College (Wills Eye Hospital) Philadelphia, Pennsylvania	12,000	102,000
Johns Hopkins University Baltimore, Maryland	12,000	127,000
* Kansas, University of Kansas City, Missouri	6,000	6,000
Louisiana State University New Orleans, Louisiana	12,000	37,000
Louisville, University of Louisville, Kentucky	12,000	107,000
Maryland, University of Baltimore, Maryland	12,000	82,000
Mayo Medical School Rochester, Minnesota	12,000	42,000
Miami, University of Miami, Florida	12,000	127,000
Michigan, University of Ann Arbor, Michigan	12,000	127,000
Minnesota, University of Minneapolis, Minnesota	12,000	127,000
Missouri, University of, Columbia Columbia, Missouri	12,000	19,500
Mt. Sinai School of Medicine New York, New York	12,000	102,000
New York University New York, New York	12,000	127,000
North Carolina, University of Chapel Hill, North Carolina	12,000	19,500
Northwestern University Chicago, Illinois	—	5,000
Oklahoma, University of Oklahoma City, Oklahoma	12,000	24,500
Oregon, University of Portland, Oregon	12,000	127,000
Pacific Medical Center San Francisco, California	12,000	82,000
Pennsylvania, University of Philadelphia, Pennsylvania	12,000	127,000
Pittsburgh, University of Pittsburgh, Pennsylvania	12,000	42,000

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Scientists now hope for similar progress in their efforts to control the more common senile form of cataracts that are present in 60 percent of those over 60—and are a major cause of visual disability in the elderly.

Recently discovered procedures for growing human ocular cells in laboratory cultures have opened an important new field for exploration of the effects of drugs on living eye tissues. Without risking damage to the eyes of patients, the nature of living retinal cells and corneal tissue can be studied and their reaction to numerous chemicals observed. There is even hope that healthy cells, grown in the laboratory, may someday be transplanted into the eyes of patients whose own cells have been depleted or damaged by disease. Most important will be the ability to study in culture all aspects of active cells that cannot be subjected to experimentation in the living human eye.

As knowledge of the eye expands, along with the practical means to exploit it, scientists probe with confidence for solutions to the most complex of questions. What are the fundamental causes of glaucoma? How does intraocular pressure affect the optic nerve? What are the key factors in degenerative retinal diseases? What are the chemical codes that relay visual signals to the brain? How can these circuits be protected, nourished and regenerated? What causes "dry eye"? How are retinal hemorrhages triggered?

Such questions, naively stated, represent the mere surface of the myriad problems that underlie efforts to understand and preserve the phenomenon of sight. The challenge lies deeper, in the endless piecing together of bits of information, in dedication to tireless questioning, testing and observation, in the unquenchable desire to know what has not been known, to see what once could not be seen.

Research to Prevent Blindness continues to mobilize essential resources for successful eye research—the trained scientists, the laboratory space, technical equipment and financial support without which such efforts cannot be sustained. Its leadership has been the critical factor in awakening today's massive response to the challenge of blinding diseases.



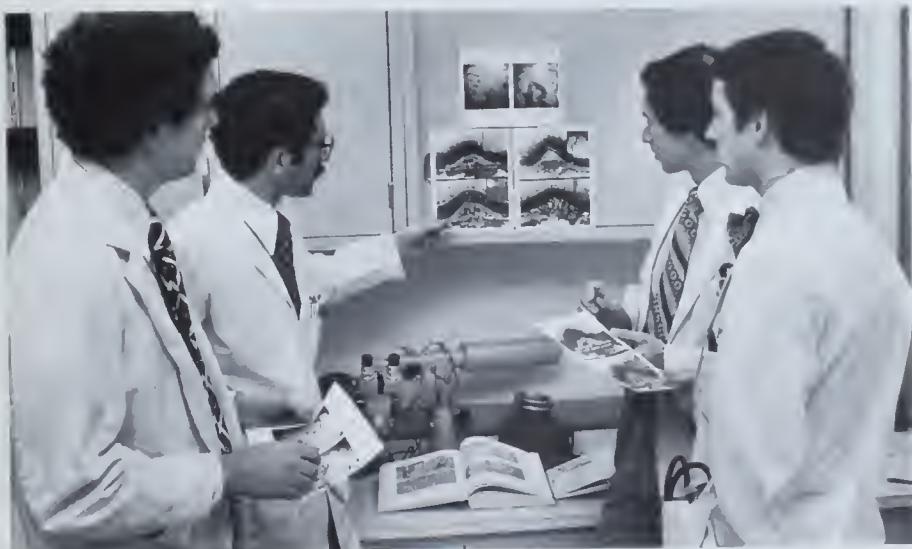
*The finely-structured vascular system of the human retina, whose function is essential to the transmission of visual signals to the brain. (Georgetown University)*

*200,000 people over age 50 develop senile macular degeneration each year. It is the major cause of blindness among the elderly.*





*Early discovery and treatment of eye disorders in infants may prevent a lifetime of visual disability. (University of Oklahoma)*



*The impact of RPB's programs is felt throughout the nation's medical schools, where outstanding young physicians and scientists are being attracted to careers in eye research. (University of Colorado)*

*31,000,000 visits are made to doctors each year for eye problems.*

## **Annual Research Grants to Institutions**

(continued)

	1981 GRANTS	TOTAL GRANTED THROUGH 1981
Proctor Foundation, Francis I. San Francisco, California	\$12,000	\$127,000
Retina Foundation (Eye Research Institute) Boston, Massachusetts	—	97,500
* Rochester, University of Rochester, New York	6,000	13,500
Southern California, University of Los Angeles, California	12,000	47,000
Stanford University Stanford, California	12,000	72,000
* St. Louis University St. Louis, Missouri	6,000	6,000
Temple University Philadelphia, Pennsylvania	—	30,000
Texas Tech University Lubbock, Texas	12,000	19,500
Texas, University of San Antonio, Texas	—	5,000
Texas, University of (Southwestern Medical School) Dallas, Texas	—	10,000
Tufts University, Boston, Massachusetts	12,000	77,000
Tulane University New Orleans, Louisiana	—	75,000
Vanderbilt University Nashville, Tennessee	12,000	77,000
Virginia, Medical College of Richmond, Virginia	12,000	92,000
Washington, University of Seattle, Washington	12,000	82,000
Washington University St. Louis, Missouri	12,000	127,000
Wayne State University Detroit, Michigan	12,000	92,000
* West Virginia University Morgantown, West Virginia	6,000	6,000
Wisconsin, Medical College of Milwaukee, Wisconsin	12,000	82,000
Wisconsin, University of Madison, Wisconsin	12,000	67,000
Yale University New Haven, Connecticut	12,000	117,000

## RPB Special Research Scholars

Since RPB introduced its Special Research Scholars Awards program a decade ago, 26 scientists have been selected for such singular support. The purpose of the awards is to assist and encourage primarily young investigators engaged in pioneering work of exceptional merit and promise. The recipients continue to fulfill their potential brilliantly. The first went on to win the prestigious RPB Trustees Award seven years later, for his development of a revolutionary surgical procedure for vitrectomy. Another determined the cause and produced a cure for pigmentary glaucoma. The work of each of the others has been similarly significant in contributing to knowledge of a wide range of diseases and their management.

During the past year, five RPB Special Research Scholars were selected, among them the first scientist to be assisted by an unusually magnanimous gift to RPB from Mrs. Dolly Green, the prominent West Coast philanthropist. Mrs. Green's generosity has provided \$500,000 for the establishment of a permanent endowment whose annual interest will fund the largest of the Scholars Awards, which has been named in her honor. RPB's scientific advisory committees and trustees selected Anita E. Hendrickson, Ph.D., professor of ophthalmology at the University of Washington, Seattle, as recipient of the initial award. Dr. Hendrickson is internationally recognized for her studies in neuroanatomy and the development of the visual system from the time of birth. Her major objective is to learn why and how an eye deprived of sight during the early period of its development will "turn off" and become useless, resulting in amblyopia, a widespread disorder in children that may result in perma-

gent visual impairment. The award will assist Dr. Hendrickson's comparative studies of progressive biological changes that take place in the developing visual systems of both sighted and monocularly deprived laboratory animals.

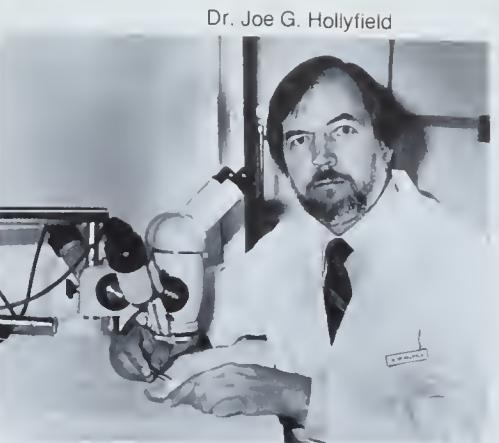
Among the frequent complications that diabetes can visit on the visual system is an unexplained delay in healing of the cornea following surgery or injury. The result is recurrent erosion of the outer window of the eye—threatening sight. RPB's William and Mary Greve International Research Scholars Award has gone to a distinguished young investigator of corneal diseases in diabetics. She is Diane L. Van Horn Hatchell, Ph.D., professor of ophthalmology and physiology at the Medical College of Wisconsin, Milwaukee. Working with diabetic laboratory animals, Dr. Hatchell has discovered a deficiency in their corneal cells that prevents normal healing. She has devised a technique for comparing and analyzing microscopically the healing processes of both normal and diabetic animals. Her objective is an effective mode of treatment for the disease in human diabetics.

The human retina—a thin network of nerve tissue that lines the inner wall of the eye—is the most essential, and most inaccessible, element in the eyeball. Disorders of the retina are the major cause of blindness in the United States. The effect of these disorders may be observed through various techniques, sometimes treated with a laser beam. A detached retina may be reattached through delicate manipulation. But the retina cannot be removed, biopsied or otherwise physically altered without damage to its function and to



Dr. Anita E. Hendrickson

the integrity of the whole eye. Recently, scientists have made it possible to work with bits of retinal tissue taken from donor eyes, kept alive and grown in laboratory cultures. Among these researchers is Joe G. Hollyfield, Ph.D., a young professor of ophthalmology at Baylor College of Medicine, Houston, Texas, whose pioneering work has won the support of RPB's Olga Keith Wiess Research Scholars Award. Dr. Hollyfield, a cell biologist, has established a method for extracting small buttons of donated human retinal tissue and maintaining large numbers of these in culture for sufficient time to analyze their metabolism. It is his aim to simulate degenerative diseases in cultures of normal human retinal tissue, providing a laboratory "testing ground" for the study of factors in retinal metabolism that may be significant in a host of inherited retinal disorders.



Dr. Joseph Horwitz

850,000 have severe visual impairment from retinal disease.

### Recipients of RPB Special Research Scholars Awards for ongoing work in 1981

Anita E. Hendrickson, Ph.D. University of Washington, Seattle	\$50,000
Diane L. Van Horn Hatchell, Ph.D. Medical College of Wisconsin, Milwaukee	\$30,000
Joe G. Hollyfield, Ph.D. Baylor College of Medicine Houston, Texas	\$20,000
Joseph Horwitz, Ph.D. University of California, Los Angeles	\$15,000
Anne B. Fulton, M.D. Harvard University Boston, Massachusetts	\$15,000
Harry A. Quigley, M.D. Johns Hopkins University Baltimore, Maryland	\$25,000
Dominic Man-Kit Lam, Ph.D. Baylor College of Medicine Houston, Texas	\$10,000
Frederick A. Jakobiec, M.D. Cornell University New York, New York	\$10,000
Kenneth R. Kenyon, M.D. Harvard University Boston, Massachusetts	\$10,000
†Robert W. Rodieck, Ph.D. University of Washington, Seattle	\$10,000
†Shambhu D. Varma, Ph.D. University of Maryland, Baltimore	\$25,000
†Mark O.M. Tso, M.D. University of Illinois, Chicago	\$25,000

### RPB Manpower Award Recipients for ongoing work in 1981

Nicolas G. Bazan, M.D. Louisiana State University	\$ 7,500
*J. Bronwyn Bateman, M.D. University of California, Los Angeles	\$25,000
John Snider, III, M.D. University of Oregon	\$ 3,000
Lezheng Wu, M.D. Johns Hopkins University	\$ 7,500
Keith Green, Ph.D. Medical College of Georgia	\$ 7,500
*Roberta Meyers-Elliott, Ph.D. University of California, Los Angeles	\$25,000

†Earlier award extended.

\* Award designated by donor for local area.

Babies can't tell what they can see—or can't see. Yet it is critical to know whether vision in its earliest stages is developing normally, or abnormally. Lack of that knowledge has resulted in a lifetime of visual disability for many millions of people. Modern scientists are intensely interested in finding ways to test precisely the sight of preverbal infants. The objective—to diagnose and treat abnormalities at the earliest possible stage. One such scientist is Anne B. Fulton, M.D., assistant professor of ophthalmology at Harvard Medical School and recipient of the 1981 RPB-James S. Adams Scholars Award. Dr. Fulton has developed innovative tests to define the rapidly-changing visual capabilities of infants in the early weeks and months after birth. Her tests also make it possible for her to correlate such changes with changes observed in retinal anatomy, providing clues to the sources of abnormal vision. In related experiments, Dr. Fulton is exploring the developing visual systems of normal young mice and those with hereditary retinal disease in an effort to pinpoint where normal and abnormal signal-processing systems deviate. The knowledge would add significantly to the understanding of human eye disorders.

Joseph Horwitz, Ph.D., professor of ophthalmology and biophysics and associate director of the Jules Stein Eye Institute at the University of California, Los Angeles, is recipient of the RPB-Robert E. McCormick Award for 1981. The award will assist his basic research in human senile cataract formation. Dr. Horwitz is exploring the biological changes that occur in the human lens during the development of cataracts in an effort to establish those factors responsible for their formation. Past research, using pooled whole lenses, has failed to disclose any significant difference between the properties of normal and cataractous lenses. The UCLA scientist

has built an instrument of unusual sensitivity with which he will separate and analyze lens proteins from minute clouded areas of senile cataracts for biological comparison with adjacent normally transparent areas. An estimated 24 million persons aged 60 or over have some degree of cataract formation.

In addition to its Special Scholars Awards, RPB in 1981 designated four scientists to receive RPB Manpower Awards. These are given to specially deserving researchers whose circumstances merit financial assistance for their ongoing work. The recipients are:

Nicolas G. Bazan, M.D., professor of ophthalmology, neurobiology and biochemistry at Louisiana State University School of Medicine, who is establishing a biochemistry laboratory to investigate lipid membrane synthesis and its relationship to retinal degenerative diseases.

J. Bronwyn Bateman, M.D., assistant professor of ophthalmology at the University of California, Los Angeles, for the collection and computerization of data on patients with strabismus and their families, for analysis of the genetic and nonhereditary factors contributing to the disorder.

John Snider III, M.D., of the University of Oregon School of Medicine, who is applying computer technology to the clinical research testing of genetically transmitted eye diseases such as retinitis pigmentosa and its allied disorders.

Lezheng Wu, M.D., a visiting professor at Johns Hopkins University who has developed an improved method for interpreting the electrical activity generated by nerves of the retina as it sends visual signals to the brain. The technique holds promise for far more accurate diagnosis of various retinal disorders.



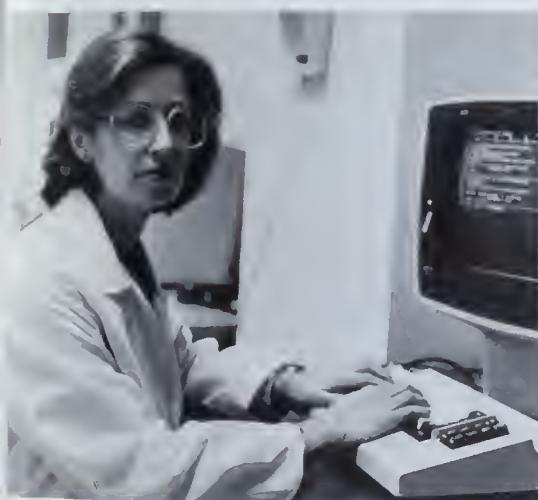
Dr. Anne B. Fulton



Dr. Nicolas G. Bazan



Dr. John Snider III



Dr. J. Bronwyn Bateman



Dr. Lezheng Wu

*572,000 office visits are made each year by youngsters under 15 with strabismus (crossed eyes).*

## RPB Research Professors

Peter Gouras, M.D. Columbia University	\$75,000
J. Terry Ernest, M.D., Ph.D. University of Illinois, Chicago	\$75,000

## RPB Foreign Fellowships

Ricardo B. Akstein, M.D. (Brazil) at Emory University	\$15,000
Yitzchak J. Gordon, M.D. (Israel) at University of Pittsburgh	\$15,000

## RPB International Research Scholars in collaborative studies at U.S. institutions

Sampei Miyake, M.D. at Johns Hopkins University	Japan
John Marshall, B.Sc., Ph.D. at University of Pennsylvania	England
Avinoam Adam, Ph.D. at University of Michigan	Israel
Wang Wen Ji, M.D. at Harvard University	China
Antonio S. Henriquez, M.D., Ph.D. at Harvard University	Spain
Michel Gonvers, M.D. at Duke University	Switzerland
Enrico Reale, M.D. at University of California, Los Angeles	West Germany
Liliana Luciano, Ph.D. at University of California, Los Angeles	West Germany
Willem Frits Treffers, M.D. at University of Miami	Holland
Olli Gunnar Simell, M.D. at Johns Hopkins University	Finland
Norma Marie Giusto, Ph.D. at Baylor College of Medicine	Argentina
Issei Hanada, M.D., Ph.D. at University of Miami	Japan
Arto Palkama, M.D. at Louisiana State University	Finland
Hu Dan-Ning, M.D. at Johns Hopkins University	China



During the past year, 14 such RPB scholars were at work in the United States, sharing their experience and expertise with fellow scientists in projects of intense mutual interest. Six were completing work begun in previous months, having established scientific relationships that will continue long after their return home. Eight others, from as many countries, joined research teams from coast to coast in a combined international effort.

Newly appointed RPB International Research Scholars in 1981 were:

Antonio S. Henriquez, M.D., of the University of Barcelona, Spain, whose visit at Harvard Medical School, Boston, resulted in three significant papers on ocular immunity and a fourth concerning corneal disease. Dr. Henriquez participated in research, lectures, conferences and seminars with physicians and medical students in the Boston area.

## RPB International Research Scholars

No country escapes the tragedy of blindness. Eye diseases that have plagued generation after generation continue to rob the sight of large segments of the world's population. At this moment 42 million people are blind. Many times that number suffer from diseases that may ultimately destroy their sight. Since 1969, Research to Prevent Blindness (RPB) has moved to bring together in a working environment the minds and hands of skilled researchers in whatever countries they may be found, to address specific problems of vision. Through RPB's International Research Scholars Program 73 scientists from 24 countries have traveled here for limited visits to collaborate in studies on a wide range of eye disorders affecting people here and abroad. Thirty-four American institutions have benefitted from the program.

John Marshall, B.Sc., Ph.D., of the Institute of Ophthalmology, London, England, who collaborated with vision scientists at the University of Pennsylvania, Philadelphia. Dr. Marshall has a wide background in physics. He joined forces with a noted microscopist here in the development of new techniques in the use of the scanning electron microscope for ocular pathology, especially in eye cancer.

Sampei Miyake, M.D., of Nagoya University School of Medicine, Japan, whose stay at Johns Hopkins University, Baltimore, gave continuity to studies begun under a previous RPB scholar. Dr. Miyake's activities involve disorders of the immune system that may be at the base of many degenerative eye diseases. He is also exploring the feasibility of biopsies of human retinal tissue, which would be a major step toward the understanding and management of retinal disorders.

Wang Wen Ji, M.D., of Shanghai First Medical College, China, is also a visitor at Harvard Medical School where she is participating in studies of ocular pathology techniques in retinal and vitreous diseases. In a major project she has reviewed and assessed surgical complications occurring over the past 20 years, a trove of accumulated information that she will apply to the clinical activities of her home institution.

Avinoam Adam, Ph.D., of Tel-Aviv University, Israel, began collaborative studies at the University of Michigan, Ann Arbor, where his work in ocular genetics parallels that of an American scientist at the University. The two are attempting a physiological analysis of subtle changes that occur in the color vision of female carriers of a recessively inherited defective chromosome, seeking to determine whether these are genetically predictable.

Dr. Sampei Miyake



Dr. Antonio S. Henriquez



Michael Gonvers, M.D., of the University Eye Hospital, Lausanne, Switzerland, worked with retinal and vitreous surgeons at Duke University, North Carolina. In addition to his lectures, Dr. Gonvers explored new techniques for averting the serious consequences of spontaneous scar tissue formation that is a major impediment to surgery for retinal detachment.

Previously appointed RPB International Research Scholars at work in 1981 included:

Norma Marie Giusto, Ph.D., of Bahia Blanca, Argentina, engaged in retinal research at Baylor College of Medicine, Houston, Texas.

Issei Hanada, M.D., Ph.D., of Sapporo, Japan, in studies of strabismus (crossed eyes) at the University of Miami, Florida.

Hu Dan-Ning, M.D., of Shanghai, China, studying genetic retinal diseases at Johns Hopkins University.

Arto Palkama, M.D., of Helsinki, Finland, pursuing basic research in glaucoma at Louisiana State University, New Orleans.

Olli Gunnar Simell, M.D., also of Helsinki, Finland, conducting investigations in degenerative eye diseases such as gyrate atrophy and retinitis pigmentosa, at Johns Hopkins University.

Willem Fritz Treffers, M.D., of Nijmegen, Netherlands, pursuing corneal research at the University of Miami, Florida.

Enrico Reale, M.D., and Liliana Luciano, Ph.D., of Hannover, West Germany, for studies of the long-term effects of surgical removal of the vitreous body, at the University of California, Los Angeles.

Dr. John Marshall



Drs. Reale and Luciano

## A New Program is Launched

The enormity of worldwide blindness presents a challenge to which medical science has only recently begun to respond. A critical need of many foreign nations is the presence of well-trained native scientists who are not only personally proficient in vision research, but who are capable of leadership in the organization of substantial research programs in their home environment. In an effort to encourage such development, RPB has announced the availability of a limited number of fellowships for selected foreign candidates who hold advanced degrees from recognized medical institutions. The program will assist their pursuit of research training in the United States with the explicit condition that they return to assured academic positions in their home countries upon completion of their training.

In 1981 two RPB Foreign Fellows became the first to begin training under the program. They are Ricardo B. Akstein, M.D., of the University of Rio de Janeiro, Brazil, and Yitzchak J. Gordon, M.D., of Hadassah University, Israel. Dr. Akstein is training at Emory University School of Medicine, Atlanta, from which he has reported on his basic and clinical studies in retinal and vitreous surgery. Dr. Gordon's initial work involves collaborative research in which the destructive herpes simplex I virus is being chemically altered in the hope of developing a vaccine against this widespread corneal infection.



Dr. Yitzchak J. Gordon



*The 1981 Nobel Prize for Medicine was awarded to two Harvard scientists whose work in vision research was recognized and assisted by RPB more than a decade ago. Drs. David Hubel (left) and Torsten Wiesel are shown in a 1971 photo as they received the \$25,000 RPB Trustees Award from Dr. Jules Stein for their brilliant contributions to fundamental knowledge of the brain's visual cortex, the work for which they have now become Nobelists.*



*Presentation of the first RPB-Jules Stein Award by Mrs. Jules Stein. (l to r): RPB president Lew R. Wasserman, Mrs. Stein, Dr. Patz, Professor Ashton, and Dr. David Shoch, president of the American Academy of Ophthalmology.*



**The Jules Stein Award**, medicine's richest prize for ophthalmic achievement, was presented for the first time in November, 1981 at the annual meeting of the American Academy of Ophthalmology. As more than 12,000 eye physicians and scientists looked on, Mrs. Jules Stein made the presentation to Dr. Arnall Patz, of Johns Hopkins University, and Professor Norman Ashton, of the Royal College of Surgeons of England. Thousands of youngsters owe their sight to the pioneering achievements of Drs. Ashton and Patz who solved the mystery of retrobulbar fibroplasia, a blinding eye disease that destroyed the sight of premature infants before the scientists demonstrated the cause to be excessive oxygen administered routinely in nursery incubators. Both have made historic contributions to basic and clinical knowledge of the retina and its diseases. The Trustees of RPB have established the \$50,000 RPB-Jules Stein Award to honor the memory of RPB's founder and leader. It succeeds the former \$25,000 RPB Trustees Award for Outstanding Ophthalmic Achievement and, like the latter, is financed from the personal contributions of members of the Board.

Mrs. Jules Stein was elected to vice presidency on the Board of Trustees at their December meeting. She has announced that she will continue a tradition which she and her husband established through which they have generously matched all contributions made to RPB in response to their annual personal appeal letters. Before Dr. Stein's passing he had agreed to match up to one million dollars in such gifts, and Mrs. Stein has made a similar commitment for the year ahead. More than \$973,000 was received—and doubled by the Steins' contributions—in 1981. Through the years, the Steins' gifts to RPB have totalled more than \$8,840,000.

Another RPB tradition established by Dr. Stein will be carried on through the generosity of its president, Mr. Lew R. Wasserman. Mr. Wasserman invites all practicing ophthalmologists and vision scientists to accept membership as Ophthalmological Associates in Research to Prevent Blindness and, as did Dr. Stein, he will personally match their initial \$100 membership fees thus doubling the value of their assistance to eye research. More than 2,750 practitioners and researchers have taken the opportunity to combine their professional interests and their philanthropy through RPB membership.



Research to Prevent Blindness, Inc.  
**Statements of Support, Revenue, Expenses and Changes in Fund Balances**

Year ended December 31, 1981

(With comparative totals for 1980)—(Note 1)

**Public support and revenue:**

	Current Fund	Endowment	Total	
	Unrestricted	Restricted	Year ended December 31, 1981	1980
Public support:				
Cash donations	\$ 727,196		\$ 727,196	\$ 806,827
MCA Inc. common stock donated (Note 2)	8,438		8,438	23,018
Other securities donated (Note 2)	102,935		102,935	72,291
Ophthalmological Associate Memberships	136,701		136,701	122,400
Other public support	3,629		3,629	2,212
	978,899		978,899	1,026,748
Revenue:				
Interest and dividends	1,120,191	\$ 80,000	1,200,191	884,795
Unexpended grants returned	4,200		4,200	46,200
Gain on sale of securities	11,268		11,268	8,844
	2,114,558	80,000	2,194,558	1,966,587

**Expenses:**

Program services:				
Research grants (see Statement of Functional Expenses for classifications)	863,050	80,000	943,050	627,990
Program development to stimulate laboratory expansion and eye research activities	105,420		105,420	97,727
Scientific symposia, seminars and surveys	84,284		84,284	57,355
Laboratory construction support projects	7,009		7,009	6,981
Public and professional information	193,551		193,551	199,748
	1,253,314	80,000	1,333,314	989,801
Supporting services:				
Management and general	113,929		113,929	98,301
Fund raising	10,610		10,610	10,881
	1,377,853	80,000	1,457,853	1,098,983

Excess of public support and revenue over expenses before capital additions

736,705

736,705

867,604

Capital additions (Note 3):

Cash donations		\$ 1,000	1,000	701,000
MCA Inc. common stock donated (Note 2)		1,030,062	1,030,062	1,203,319
Interest and dividends	84,933		84,933	64,728
Bequests receivable		25,000	25,000	
	84,933	1,056,062	1,140,995	1,969,047
Total capital additions				
Excess of support and revenue over expenses after capital additions	736,705	84,933	1,056,062	1,877,700
Fund balances, beginning of year	9,881,719	64,728	2,354,962	12,301,409
Fund balances, end of year	\$10,618,424	\$149,661	\$3,411,024	\$14,179,109
				\$12,301,409

# Research to Prevent Blindness, Inc.

## Balance Sheets

(Note 1)

### Assets

	December 31,	
	1981	1980
Cash (including savings accounts		
1981—\$133,829; 1980—\$22,634)	\$ 167,240	\$ 45,970
Certificates of deposit	2,005,000	1,844,000
Investments, at cost (Note 2)	11,830,306	10,273,421
Pledges and bequests receivable	136,140	142,170
Interest and dividends receivable and other assets	313,000	250,248
 Total assets	 <u>\$14,451,696</u>	 <u>\$12,555,809</u>

### Liabilities and fund balances

#### Liabilities:

	1981	1980
Accounts payable and accrued expenses	\$ 43,947	\$ 44,730
Research professorship and fellowship grants payable	117,500	67,500
Deferred revenue	111,140	142,170
 Fund balances:	 <u>272,587</u>	 <u>254,400</u>
Endowment Funds (Note 3)	3,411,024	2,354,962
Current Restricted Fund	149,661	64,728
Current Unrestricted Fund	10,618,424	9,881,719
 Total liabilities and fund balances	 <u>\$14,451,696</u>	 <u>\$12,555,809</u>

## Notes to Financial Statements—December 31, 1981 and 1980

### Note 1—Nature of the Organization and Significant Accounting Policies:

**Nature of the organization:** Research to Prevent Blindness, Inc. (RPB) is a tax-exempt organization formed for the purpose of providing the organizational and financial resources necessary to support eye research.

**Significant accounting policies:** *Gifts, grants, pledges and bequests*—All unrestricted gifts and grants are reported in the Current Unrestricted Fund. Bequests and gifts accepted with the donor stipulation that the principal be maintained intact in perpetuity are reported in the Endowment Funds. RPB records pledges received during the current year, net of doubtful amounts; revenue recognition on such pledges is deferred until such time that RPB receives the pledged contributions.

*Interest and dividend income*—Interest income is recorded on an accrual basis. Dividends are recorded as income on the ex-dividend date.

*Carrying value of investments*—Equity securities are stated at the lower of aggregate portfolio cost or market value. Marketable debt securities are stated at cost since there is both the ability and intention to hold these securities until maturity.

*Expense allocation*—Salaries are generally charged to the various programs based on the amount of time spent by specific individuals on each program; fringe benefits and other employee costs are allocated on an overall basis, corresponding generally to the allocation of salary expenses. All other expenses can generally be identified with the program or support service they relate to and are charged accordingly.

**Endowment Funds (Note 3)**—RPB has established, at donors requests, several Endowment Funds, two of which restrict interest and dividends earned on the investment of their respective fund balances: The William and Mary Greve Memorial Endowment Fund, which requires that a research grant of at least \$25,000 be awarded each year, and the Dolly Green Endowment Fund, which requires that a research grant in an amount to be determined by the Board of Trustees be awarded each year. All restricted Endowment Fund income is accumulated in the Current Restricted Fund. Dividend and interest income of the remaining Endowment Funds are unrestricted as to use and are included in the Current Unrestricted Fund.

**Taxes**—RPB is a publicly supported charity exempt from taxes under Internal Revenue Code Section 501(c) (3).

**Note 2—Investments:** Investments owned and the respective market values at December 31, 1981 and 1980 were as follows:

	1981		1980	
	Carrying value	Market value	Carrying value	Market value
MCA Inc. common stock	\$ 7,931,619	\$15,123,100	\$ 6,893,120	\$16,596,491
Other common stocks	427,347	640,395	397,079	689,222
U.S. Government obligations	3,450,909	3,353,213	2,962,791	2,808,500
Corporate bonds	20,431	13,975	20,431	15,484
	<u>\$11,830,306</u>	<u>\$19,130,683</u>	<u>\$10,273,421</u>	<u>\$20,109,697</u>

**Note 3—Endowment Funds:** Endowment Funds activity for the years ended December 31, 1981 and 1980 are as follows:

Endowment Fund	Balance at December 31, 1979	Contributions to fund	Balance at December 31, 1980	Contributions to fund	Balance at December 31, 1981
Jules and Doris Stein		\$1,050,313	\$1,050,313	\$1,005,048	\$2,055,361
Dolly Green		500,000	500,000		500,000
William and Mary Greve Memorial	\$309,943	200,000	509,943	1,000	510,943
Lew R. and Edie Wasserman		153,006	153,006	25,014	178,020
Desiree L. Franklin	138,700		138,700		138,700
Eugene G. Blackford Memorial	2,000	1,000	3,000	25,000	28,000
	<u>\$450,643</u>	<u>\$1,904,319</u>	<u>\$2,354,962</u>	<u>\$1,056,062</u>	<u>\$3,411,024</u>

**Note 4—Pension Plan:** RPB has a defined contribution pension plan covering all of its employees. Pension costs under the plan were \$50,000 and \$43,900 for the years ended December 31, 1981 and 1980, respectively. RPB makes annual contributions to the plan equal to the amounts accrued for pension expense.

**Note 5—Bequests:** During the year ended December 31, 1981, RPB was named a legatee in the wills of several individuals, including the late Dr. Jules Stein. At present, the amounts bequeathed to RPB are not determinable and, as such, have not been reflected in the financial statements.

# Statement of Functional Expenses, Year Ended December 31, 1981

(With comparative totals for 1980)—(Note 1)

	Program Services					Supporting Services			Total Expenses		
	Research		Scientific symposia, seminars and surveys	Laboratory construction support projects	Public and professional information	Total	Manage- ment and general	Fund raising	Total	1981	1980
	Grants	Program develop- ment									
Research grants to medical schools and other institutions	\$612,000					\$ 612,000			\$ 612,000	\$ 468,750	
Special Scientific Scholars grants and International Research Scholars grants	188,550					188,550			188,550	81,240	
Research Professorships, Manpower and Visiting Professors grants	77,500					77,500			77,500	43,000	
Special, Emergency and Foreign Fellowship grants	65,000					65,000			65,000	35,000	
Salaries	\$ 42,773	\$30,673	\$4,637	\$ 82,987	161,070	\$ 62,980	\$ 5,614	\$ 68,594	229,664	187,747	
Employee health and retirement benefits	14,446	9,848	1,588	25,737	51,619	19,924	1,871	21,795	73,414	64,090	
Payroll taxes	2,239	1,619	255	4,394	8,507	3,347	287	3,634	12,141	9,639	
Professional fees	8,880			8,250	17,130	2,560		2,560	19,690	19,913	
Outside consultants						15,700		15,700	15,700	7,500	
Professional services	5,775	269		20,834	26,878	3,002	225	3,227	30,105	41,800	
Conferences, seminars and meetings	1,621	18,943	178	546	21,288	1,365		1,365	22,653	15,333	
Travel	1,344	10,211	305	737	12,597	713		713	13,310	11,180	
Telephone and telegraph	1,588	1,245	16	2,088	4,937	660	95	755	5,692	5,003	
Postage and shipping	4,430	737	15	10,803	15,985	207	701	908	16,893	15,269	
Printing and stationery	20,801	9,182		33,028	63,011	464	1,583	2,047	65,058	79,466	
Office supplies	300	433		2,365	3,098	2,135		2,135	5,233	4,203	
Office equipment rental and maintenance	454	180	8	966	1,608	301	226	527	2,135	1,873	
Dues and subscriptions	712	907		398	2,017	8		8	2,025	2,412	
Insurance	57	37	7	98	199	76	8	84	283	828	
Office equipment				320	320	487		487	807	4,155	
Miscellaneous										582	
Total expenses	<u>\$943,050</u>	<u>\$105,420</u>	<u>\$84,284</u>	<u>\$7,009</u>	<u>\$193,551</u>	<u>\$1,333,314</u>	<u>\$113,929</u>	<u>\$10,610</u>	<u>\$124,539</u>	<u>\$1,457,853</u>	<u>\$1,098,983</u>

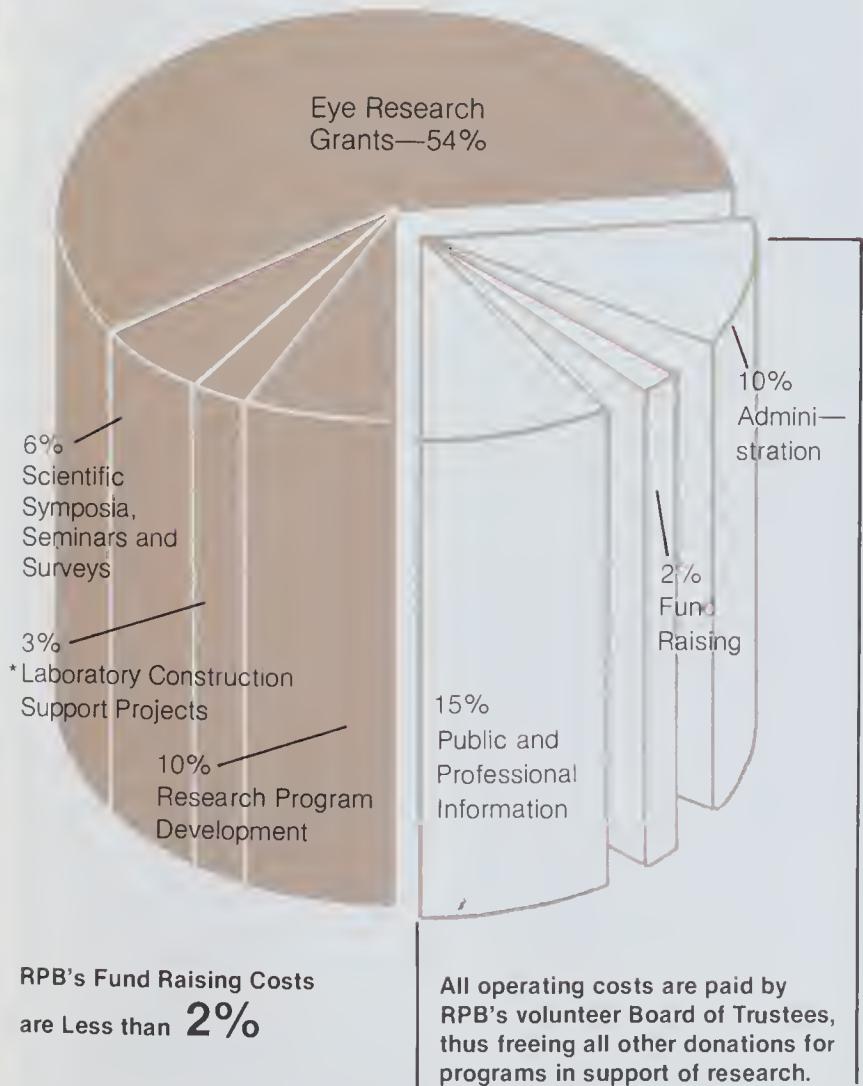
## Report of Independent Accountants

To the Board of Trustees of Research to Prevent Blindness, Inc.

In our opinion, the accompanying balance sheets and the related statements of support, revenue, expenses and changes in fund balances and of functional expenses present fairly the financial position of Research to Prevent Blindness, Inc. at December 31, 1981 and 1980 and the results of its operations and the changes in its financial position for the years then ended, in conformity with generally accepted accounting principles consistently applied. Our examinations of these statements were made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

# How RPB Funds Were Invested, 1960-1981

## 73% Research



\* Represents RPB expenditures in underwriting building campaigns

### RPB Budget of Expenditures and/or Commitments—1982

#### Research Grants and Other Program Expenditures and/or Commitments:

Unrestricted and Developmental Grants to Medical Schools and Other Institutions	\$ 700,000
Special Scientific Scholar and International Research Scholar Grants	250,000
Research Professorship, Manpower and Visiting Professor Grants	140,000
Special, Emergency and Foreign Fellowship Grants	75,000
Research Program Development, Construction Grants and Related Support	125,000
Scientific Surveys, Seminars and Symposia	150,000
Public and Professional Information	270,000
	<u>\$ 1,710,000</u>

#### Supporting Services:

Salaries, Employee Benefits and Payroll Taxes	\$ 95,000
Professional/Consultant Fees and Services	39,000
Travel and Meetings	3,000
Telephone and Telegraph	1,000
Postage, Printing and Shipping	1,000
Office Supplies, Equipment and Maintenance	50,000
Fund Raising	15,000
Miscellaneous (dues, subscriptions, etc.)	1,000
	<u>\$ 205,000</u>

#### Total Planned Expenditure and Commitments

	<u>\$ 1,915,000</u>
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IN ADDITION to research grants shown on preceding pages, RPB has underwritten research building campaigns whose proceeds of *\$29.7 million* through 1981 were donated directly to the institutions involved.



# Research To Prevent Blindness, Inc.

Jules Stein, M.D., Founder



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*President*

## RPB's Commitment

To stimulate, sustain and intensify a concerted research attack against blindness—with the goal of developing preventives, cures and effective treatments for all diseases of the visual system that damage and destroy sight.

To do so by mobilizing logistical support for eye research, making available essential laboratory space, equipment, scientific personnel and money for the preservation of sight and the restoration of vision. Research to Prevent Blindness (RPB) dispenses annual grants for eye research to the nation's leading medical schools for the purpose of increasing their research capability and productivity. In addition, RPB provides incentives to outstanding individual scientists through special awards in support of promising ongoing research. RPB also assists selected medical schools in the construction of modern eye research centers for the advancement of clinical and basic research and the training of ophthalmic scientists.

*Lewis Thomas, M.D., and Donald F. Steiner, M.D., D.Med.Sci., joined RPB's distinguished Scientific Advisory Panel in 1981. Dr. Steiner, a noted biochemist, physician and educator, is Pritzker professor of biochemistry and medicine at the University of Chicago School of Medicine, and is an authority in the field of diabetes. Dr. Thomas is chancellor of the Memorial Sloan-Kettering Cancer Center in New York City. His eminent career as physician, educator, medical administrator and author embraces a wide range of scientific interests. Both will serve as volunteers, as do all members of the Scientific Panel and Board of Trustees.*

## RPB's Record of Achievement

RESEARCH TO PREVENT BLINDNESS (RPB) is unique among all voluntary health organizations in that its programs and funds are directed entirely to the support of scientific research into every major blinding eye disease. RPB makes it possible to *do something* about blindness *before it happens*. Its efforts are directly responsible for unprecedented advances now being made in the treatment and prevention of visual disorders which are the cause of almost all blindness in the United States. Scientists working with RPB support have preserved and restored the vision of many thousands who otherwise would be hopelessly blind. Since its founding by Dr. Jules Stein in 1960, RPB has:

- Channeled more than **\$40 million** into vision research at a fund raising cost of less than **two percent**.
- Provided annual grant support to **65** U.S. medical institutions for their development of advanced programs of research into *all blinding diseases*.
- Initiated and sponsored construction of **six** major eye centers now serving the nation from coast to coast. Through RPB's laboratory construction program these were built at a fund raising cost of less than **two percent**.
- Encouraged pioneering research through special support to **161** outstanding scientists engaged in work of unusual merit.
- Stimulated international cooperation in the fight against blindness through support of collaborative research by scientists from **24** countries on working visits to **34** U.S. institutions.
- Instituted a Foreign Fellowship program to encourage the development of worldwide eye research and training capabilities.
- Initiated and led the successful movement for the establishment of a National Eye Institute among the National Institutes of Health, placing eye research among the nation's foremost health priorities.

## Your Gift or Bequest is Tax Deductible

*Research to Prevent Blindness, Inc. (RPB) is recognized by the U.S. Internal Revenue Service as a publicly supported tax exempt organization under section 501(c)(3) of the Internal Revenue Code.*

**Your Will** can fill a special role in eye research, assuring continued, uninterrupted progress toward the prevention of blinding diseases. It can be a living document that will help provide the blessings of sight to those who live after you. The following is a simple, appropriate form for making a bequest:

*"I devise and bequeath to Research to Prevent Blindness, Inc., a corporation organized and existing under the laws of the State of New York, the sum of \$\_\_\_\_\_ (or \_\_\_\_\_% of my net probate estate) (or the following described property, i.e., stocks or other tangible assets) to be used in furtherance of its general purposes."*

*Innovative concepts related to charitable giving and its tax benefits, such as the "Annuity Trust" and "Unitrust", have been introduced as a result of revisions in the Internal Revenue Code. These trusts permit a donor or testator to provide for the benefit of a family member during life or for a term of years, with the remainder of the trust eventually passing to RPB. Thus the donor or testator can provide for his family and, at the same time, make a tax deductible charitable gift. RPB will be happy to make information available regarding such alternatives.*

## Memorial Gifts

*Gifts may be made to Research to Prevent Blindness, Inc., in any amount and will be acknowledged with dignity. An appropriate Memorial Card is sent in behalf of the giver to the family of the deceased. The donor receives a Thank You card of similar design.*

### COVER PHOTO

Novel techniques for testing the vision of preverbal children permit scientists to trace the development of visual acuity in tots who cannot tell what they can or cannot see.

(Photo from Massachusetts Institute of Technology)

RPB's fund raising costs are less than two percent through two decades of service.

RPB's operating expenses are paid entirely from the contributions of its volunteer Board of Trustees.



## RESEARCH TO PREVENT BLINDNESS, INC.

598 Madison Avenue, New York, N.Y. 10022

